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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/909,759	07/23/2001	Lee C. Harrison	922-141	2504
23117	7590	09/20/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			LEE, ANDREW CHUNG CHEUNG	
			ART UNIT	PAPER NUMBER
			2664	
DATE MAILED: 09/20/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/909,759

Applicant(s)

HARRISON ET AL.

Examiner

Andrew C. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 May 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4 and 6-10 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,3,4,6,7,8,9,10 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/25/2005  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 recites the limitation "said receiver" in line 7. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 6, 3, 7, 4, 8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (U.S. Patent No. 6665549 B1) in view of Baum et al. et al. (U.S. Patent No. 6850495 B1).

Regarding Claims 1, 6, Reed discloses the limitation of a system for receiving data signals (Fig. 60, column 5, lines 4 – 18), said system comprising a radio receiver including a base-band processor for accepting a spread spectrum signal and for providing therefrom serial data signals composed of data frames each including a packet payload (column 5, lines 28 – 40; column 6, lines 7 – 11), a decoder (column 5, lines 41 – 50); a physical link, having a first end at said receiver and a second end at said decoder, for conveying said serial data signals from said radio receiver to said

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decoder (column 5, lines 30 – 33); an intelligent node including said decoder, a protocol processor for said data frames, and a bridge for coupling to a network (Fig. 1, elements 20, 22, 24, 25, 16). Reed does not disclose expressly an encapsulator at said first end for encapsulating said data frames within Ethernet frames; a de-encapsulator at said second end for receiving said Ethernet frames from said link and de-encapsulating said Ethernet frames to recover said data frames; an intelligent node including said de-encapsulator, for developing addressed Ethernet data packets from said data frames, and a bridge for coupling said Ethernet data packets to a network. Baum et al. discloses the limitation of an encapsulator at said first end for encapsulating said data frames within Ethernet frames (Fig. 19, element 1930; column 27, lines 7 – 26); a de-encapsulator at said second end for receiving said Ethernet frames from said link and de-encapsulating said Ethernet frames to recover said data frames (Fig. 19, element 1954; column 27, lines 48 – 54); an intelligent node including said de-capsulator, for developing addressed Ethernet data packets from said data frames, and a bridge for coupling said Ethernet data packets to a network (Fig. 19, elements 1954, lines 55 – 62). It would have been obvious to modify Reed to include an encapsulator at said first end for encapsulating said data frames within Ethernet frames; a de-encapsulator at said second end for receiving said Ethernet frames from said link and de-encapsulating said Ethernet frames to recover said data frames; an intelligent node including said de-encapsulator, for developing addressed Ethernet data packets from said data frames, and a bridge for coupling said Ethernet data packets to a network such as that taught by Baum et al. in order to provide an aggregation unit to aggregate physical connections

from customers for presentation to an access router and to de-aggregate traffic from a shared link(s) from the access router (as suggested by Baum et al., see column 7, lines 60 – 63).

Regarding claims 3 and 7, Reed discloses the limitation of a system for receiving data signals (Fig. 60, column 5, lines 4 – 18), Reed does not disclose expressly a system according to claimed and including means for tagging said data frames before they are encapsulated within Ethernet packets. Baum et al. discloses the limitation of expressly a system according to claimed and including means for tagging said data frames before they are encapsulated within Ethernet packets (Fig. 35, element 3526; column 17, lines 50 – 57). It would have been obvious to modify Reed to include a system according to claimed and including means for tagging said data frames before they are encapsulated within Ethernet packets such as that taught by Baum et al. in order to provide an aggregation unit to aggregate physical connections from customers for presentation to an access router and to de-aggregate traffic from a shared link(s) from the access router (as suggested by Baum et al., see column 7, lines 60 – 63).

Regarding claims 4 and 8, Reed discloses the limitation of a system for receiving data signals (Fig. 60, column 5, lines 4 – 18), Reed does not disclose expressly a system according to claimed wherein the means for encapsulating inserts at least one of said data frames followed by padding data into the message section of an Ethernet frame. Baum et al. discloses the limitation of a system according to claimed wherein the means for encapsulating inserts at least one of said data frames followed by padding data into the message section of an Ethernet frame (Fig. 12, element 1270, column 14,

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lines 39 – 44). It would have been obvious to modify Reed to include a system according to claimed wherein the means for encapsulating inserts at least one of said data frames followed by padding data into the message section of an Ethernet frame such as that taught by Baum et al. in order to provide an aggregation unit to aggregate physical connections from customers for presentation to an access router and to de-aggregate traffic from a shared link(s) from the access router (as suggested by Baum et al., see column 7, lines 60 – 63).

Regarding claim 10, Reed discloses the limitation of a method of receiving signals and transmitting signals over a local area network (Fig. 1, column 5, lines 29 – 40; column 6, lines 12 – 15), comprising: receiving a spread-spectrum signal containing message data and converting said spread spectrum signal into serial data frames conforming to a host controller interface format (Fig. 1, column 5, lines 29 – 40; column 6, lines 3 – 15); Reed does not disclose expressly encapsulating said serial data frames into Ethernet frames; conveying said Ethernet frames over a physical link; receiving said Ethernet frames from said physical link; de-encapsulating said Ethernet data frames to provide recovered serial data frames; developing by means of a protocol processor addressed Ethernet data packets from said recovered serial data frames; and forwarding said addressed Ethernet data packets to said local area network. Baum et al. discloses the limitation of encapsulating said serial data frames into Ethernet frames (Fig. 19, element 1930; column 27, lines 7 – 26); conveying said Ethernet frames over a physical link; receiving said Ethernet frames from said physical link (column 27, element 1940, lines 48 – 51); de-encapsulating said Ethernet data frames to provide recovered

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serial data frames (Fig. 19, element 1954; column 27, lines 48 – 54 ); developing by means of a protocol processor addressed Ethernet data packets from said recovered serial data frames; and forwarding said addressed Ethernet data packets to said local area network (column 27, lines 55 – 67).

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (U.S. Patent No. 6665549 B1) and Baum et al. et al. (U.S. Patent No. 6850495 B1) as applied to claims 1, 6, 3, 7, 4, 8, 10 above, and further in view of Teramoto et al. (U.S. Patent No. 6885643 B1).

Regarding claim 9, both Reed and Baum et al. et al. do not disclose expressly a system as in claimed wherein said dumb node includes a multiplexer for multiplexing host controller interface data with pulse-code modulated voice data into said data frames. Teramoto et al. discloses the limitation of a system as in claimed wherein said dumb node includes a multiplexer for multiplexing host controller interface data with pulse-code modulated voice data into said data frames (column 9, lines 30 – 67). It would have been obvious to modify Reed and Baum et al. to include expressly a system as in claimed wherein said dumb node includes a multiplexer for multiplexing host controller interface data with pulse-code modulated voice data into said data frames such as that taught by Teramoto et al. in order to provide an environment in which there is connection between a wired network and a wireless network, which enable efficient data transfer processing, giving consideration to variation in the condition of the wireless link ( as suggested by Teramoto et al. see column 2, lines 26 – 29).

***Response to Arguments***

6. Applicant's arguments with respect to claims 1, 3, 4, 6, 7, 8, 9, 10 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew C. Lee whose telephone number is (571) 272-



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3131. The examiner can normally be reached on Monday through Friday from 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ACL

Sep 12, 2005

  
Ajit Patel  
Primary Examiner